

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Canceled).
2. (Previously Presented) A method for illuminating an object, said method comprising:
  - generating a light beam with a laser;
  - adjusting the pulse width of light pulses of the light beam;
  - injecting the light beam into an optical element which spectrally broadens the light of the light beam; and
  - shaping the spectrally broadened light beam to form an illumination light beam.
3. (Previously Presented) A method for illuminating an object, said method comprising:
  - generating a light beam with a laser;
  - injecting the light beam into an optical element which spectrally broadens the light of the light beam; and
  - shaping the spectrally broadened light beam to form an illumination light beam,wherein the optical element is made of photonic band gap material.
4. (Canceled).
5. (Canceled).
6. (Currently Amended) An illuminating instrument comprising: a

laser that emits a light beam, an optical element that spectrally broadens the light from the laser and an optical means for shaping the spectrally broadened light into an illumination light beam,

wherein the optical element is made of photonic band gap material.

7. – 12. (Canceled)

13. (Original) A microscope comprising: an objective through which a sample can be illuminated and detected, the objective being arranged in both an illumination beam path and a detection beam path, an illumination pinhole being arranged in the illumination beam path, a detection pinhole being arranged in the detection beam path, an optical component arranged in the illumination beam path, which generates spectrally broadened illumination light, and an essentially polarization-independent and wavelength-independent beam splitter, which is arranged in a fixed position in the illumination beam path and the detection beam path.

14. (New) An illuminating instrument comprising: a laser that emits a light beam, an optical element that spectrally broadens the light from the laser and optics to shape the spectrally broadened light into an illumination light beam,

wherein the optical element is made of photonic band gap material.